

HIGH-PRESSURE WATER JETTING AND ABRASIVE BLASTING

“Master Industrial Surface Preparation Techniques to Achieve Optimal Coating Performance and Asset Integrity.”

Schedule

Venue (InHouse)	Fees
At Your Organization Premises	Ask For The Quotation

► **Available delivery methods:** In-House Training

Introduction

This intensive training course equips participants with the technical knowledge and hands-on insight to safely and effectively perform high-pressure water jetting and abrasive blasting operations. These are critical methods used across industries to prepare surfaces for protective coatings, remove corrosion, and restore asset performance. Emphasis is placed on safety protocols, surface cleanliness standards, equipment handling, nozzle control, abrasive media types, environmental considerations, and regulatory compliance.

Objectives

By the end of this course, participants will be able to:

- Understand principles, applications, and limitations of water jetting and abrasive blasting
- Operate equipment according to international safety standards (SSPC, WJ, ISO, NACE)
- Select appropriate pressures, abrasives, nozzles, and surface preparation techniques
- Assess surface cleanliness and profile as per coating requirements
- Implement safe work practices to protect personnel, structures, and the environment

Why Attend

Surface preparation is the foundation of long-lasting coatings and corrosion protection. This course helps you ensure compliance, coating success, operational safety, and maintenance efficiency—critical in oil & gas, marine, petrochemical, and infrastructure industries.

Target Audience

- Surface Preparation Technicians
- Coating and Painting Inspectors
- Maintenance and Corrosion Engineers
- HSE Officers and Site Supervisors
- Industrial Cleaning and Blasting Contractors
- QA/QC and Asset Integrity Professionals

Individual Benefits

- Operate water jetting and blasting tools with confidence and safety
- Qualify for roles in coating prep and industrial maintenance
- Improve your knowledge of standards and quality requirements
- Enhance on-site decision-making and minimize coating failures

Organizational Benefits

- Ensure high-quality surface prep for durable coatings and corrosion resistance
- Reduce rework, material waste, and equipment wear
- Comply with international safety and environmental standards
- Increase productivity through trained and certified personnel

Instructional Methodology

- Classroom instruction with video demonstrations and animations
- Case studies from petrochemical, shipyard, and offshore environments
- Hands-on equipment orientation (where applicable)
- Daily review quizzes, group discussions, and practical exercises
- End-of-course assessment with certification

Course Outline

DETAILED 5-DAY COURSE OUTLINE (CUSTOMIZABLE)

Training Hours: 7:30 AM – 3:30 PM **Daily Format:** 3–4 Learning Modules | Coffee Breaks: 09:30 & 11:15 | Lunch Buffet: 01:00 – 02:00

Day 1: Fundamentals of Surface Preparation

- Module 1: Surface Preparation Standards – SSPC, NACE, ISO 8501 (07:30 – 09:30)
- Module 2: Surface Contaminants, Rust Grades & Coating Failure Mechanisms (09:45 – 11:15)
- Module 3: Introduction to Abrasive Blasting and Water Jetting Methods (11:30 – 01:00)
- Module 4: Worksite Hazards and Job Planning (02:00 – 03:30)

Day 2: Abrasive Blasting – Tools, Media & Techniques

- Module 1: Types of Abrasives – Garnet, Copper Slag, Steel Grit, Soda (07:30 – 09:30)
- Module 2: Blasting Equipment – Hoses, Nozzles, Pots, Air Systems (09:45 – 11:15)
- Module 3: Surface Profile and Anchor Pattern – Measurement Tools (11:30 – 01:00)
- Module 4: Safe Operation and PPE for Blasting (02:00 – 03:30)

Day 3: High-Pressure Water Jetting

- Module 1: Pressure Categories – HP, UHP, and Water Cleaning Levels (07:30 – 09:30)
- Module 2: Jetting Equipment – Pumps, Hoses, Rotating Nozzles (09:45 – 11:15)
- Module 3: Applications – Paint Removal, Scale Cleaning, Internal Pipe Cleaning (11:30 – 01:00)
- Module 4: Jetting Hazards, Injuries & Emergency Response Planning (02:00 – 03:30)

Day 4: Quality Control, Environmental & Regulatory Aspects

- Module 1: Inspection Techniques – Visual Standards, Surface Testing, Dust Tests (07:30 – 09:30)
- Module 2: Waste Collection, Abrasive Recycling, and Water Containment (09:45 – 11:15)
- Module 3: Environmental Compliance and Emission Control (11:30 – 01:00)
- Module 4: Permit-to-Work, Toolbox Talks, and HSE Documentation (02:00 – 03:30)

Day 5: Application, Assessment & Certification

- Module 1: Surface Preparation for Coating Compatibility (07:30 – 09:30)
- Module 2: Troubleshooting Common Issues in Field Work (09:45 – 11:15)
- Module 3: Team Exercise: Worksite Planning and Safety Simulation (11:30 – 01:00)
- Module 4: Final Exam, Certification Wrap-Up & Action Plan (02:00 – 03:30)

Certification

Participants will receive a Certificate of Completion – High-Pressure Water Jetting and Abrasive Blasting upon successful participation and assessment. The program aligns with SSPC/NACE and ISO 8501-1/2 standards, making it a valuable credential for coating and maintenance professionals.

Why Choose MAWA Events

- **Global Expertise:** More than 17 years of experience in professional training and consulting.
- **Industry-Leading Faculty:** Courses delivered by seasoned professionals with hands-on experience.
- **Practical Insights:** Learn to turn theory into actionable strategies for real-world business impact.
- **Client-Focused Solutions:** Customized programs designed to achieve your organisation's unique goals.

In-House / Customized Training

Interested in running this course for your team?

Please contact us:

TEL:

+601116373203

EMAIL:

info@mawaevents.net

© Material published by MAWA Events shown here is copyrighted. All rights reserved. Any unauthorized copying, distribution, use, dissemination, downloading, storing (in any medium), transmission, reproduction or reliance in whole or any part of this course outline is prohibited and will constitute an infringement of copyright.